REMARKS

We are in receipt of the Final Rejection dated November 2, 2005 and the above amendment and following remarks are made in light thereof.

Claims 4-6 and 10-35 are pending in the application. Pursuant to the Final Rejection, the rejection of Claims 6 and 10 under 35 USC §103(a) has been withdrawn. Claims 4, 5 and 11-34 are again rejected under 35 USC §103(a) as being unpatentable over Suzuki et al. in view of Mueller et al. Claims 6, 10 and 35 are rejected under 35 USC §112, first paragraph for failing to provide an enabling disclosure.

Applicants will address the Examiner's rejections in the order in which they appear in the Final Rejection.

Claim Rejections - 35 USC §103

Claims 4, 5 and 11-34

The Examiner again rejects Claims 4, 5 and 11-34 under 35 USC §103(a) as being unpatentable over Suzuki et al. (JP 2001-043976) in view of Mueller et al. (US 6,316,786). This rejection is again respectfully traversed.

More specifically, in the Final Rejection, the Examiner asserts that Suzuki et al. disclose an electroluminescent layer substantially having the same complex as claimed but admits that Suzuki et al. fail to disclose a red luminescent compound (i.e. a guest material) such as DCM1, DCM2 or DCJT is included in the luminescent layer. The Examiner then cites Mueller et al. and contends that the reference teaches that each of DCM1, DCM2 or DCJT are well known luminescent dopants. Therefore, the Examiner asserts it would have been obvious to one of

ordinary skill in the art to have included one of DCM1, DCM2 or DCJT in the luminescent layer of Suzuki et al. because Suzuki et al. generally teach emissive dopants (DPVBi) may be included and Mueller et al. teach DCM1, DCM2 and DCJT are well known dopants for an emissive layer.

In support of this rejection, the Examiner contends that the complex of Suzuki et al. is further doped with a fluorescent compound in Example 5 (para. 33). Hence, the Examiner is assuming that the complex is a host material and the fluorescent compound is a guest material.

The Examiner's assumption, however, is incorrect. In particular, Suzuki et al. do not explicitly disclose that the complex is further doped with a fluorescent compound. Instead, Suzuki et al. merely discloses "As a luminous layer 4, the compound which are the distyryl arylene derivative (DPVBi) shown in formula 7 and a quinolinol metal complex (1) was used..." [0033]. Hence, Suzuki et al. do not explicitly disclose which material functions as host or guest. This can be ascertained by studying the energy transfer.

In the present invention, energy is transferred from the complex (the host material which emits green light and has higher energy) to the red luminescent compound (the guest material which emits red light and has lower energy), as the light emitted by the guest material is used as the luminescent color. See e.g. page 14, lines 9-13 and page 23, lines 18-19 of the present application.

In contrast, the compound DPVBi of Suzuki et al. has a maximum fluorescence wavelength (λ_{max}) of 470 to 490 nm (which emits blue light and has higher energy) while the quinolinol metal complex (1) has a maximum fluorescence wavelength (λ_{max}) of 540 to 580 nm (which emits green light and has lower energy). Since energy transfers from a higher energy level to a lower energy level, it is believed that the energy of DPVBi transfers to the quinolinol metal complex (1) and the quinolinol metal complex (1) emits light. Therefore, it is believed that the quinolinol metal complex (1) is a guest material because it is believed that the energy from

the host material (DPVBi) transfers to the guest material (the quinolinol metal complex (1) to emit light). Hence, the DPVBi is not an emissive dopant (guest material) because the DPVBi does not emit light, but instead, the quinolinol metal complex (1) emits light and would be the guest material. Therefore, it would not be logical to substitute the luminescent dopants of Mueller for the DPVBi host material of Suzuki et al..

For example, amended independent Claim 4 recites "a light emitting layer containing a guest material and a host material containing a complex of a Group 4 metal of the periodic table represented by the general formula [Formula 1]" ... "wherein the guest material has an emission wavelength with a maximum value within a range of 580 to 680 nm." Hence, the guest material is used as a dopant material, and the guest material emits light. See also e.g. page 1, line 29 to page 2, line 3 of the present application. Further, the guest material is a red luminescent compound (wavelength in a range of 580 to 680 nm can be observed as a red emission), and the complex is used as a host material. See e.g. page 3 line 28 to page 4 line 7 of the present application.

Therefore, it is improper to combine the references of Suzuki et al. and Mueller to substitute the red luminescent compound of Mueller for the DPVBi of Suzuki et al. to arrive at the claimed invention, because the DPVBi of Suzuki et al. is *not* an emissive dopant (a guest material) and Mueller merely discloses a red luminescent compound (a guest material) such as DCM1, DCM2 or DCJT as well known dopants. Hence, the combination of references is improper, and the cited references fail to disclose or suggest the claimed electroluminescent element of independent Claim 4 of the present application. Therefore, independent Claim 4 is patentable over the cited references.

For similar reasons, the rejection of Claims 5 and 11-34 is improper, and these claims are also not disclosed or suggested by the cited references but are patentable thereover. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim Rejections – 35 USC §112

Claims 6, 10 and 35

The Examiner rejects claims 6, 10 and 35 under 35 USC §112, for failing to provide an enabling disclosure with regard to all of the formula 1 materials to be used in such a way as to form a red layer, blue layer and green layer of a device.

In response, Applicants have amended claims 6 and 35 to recite the specific formula 2 compound in place of the formula 1 compound. Support for this amendment may be found in Example 5 of the specification.

New Claims

Applicants are also adding new claims 36-39. If any fee is due for these new claims, please charge our deposit account 50/1039.

Conclusion

It is respectfully submitted that the present application is in a condition for allowance and should be allowed.

If any further fee should be due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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